

Notice of Allowability

Application No.

10/006,962

Applicant(s)

SCHAFFER ET AL.

Examiner

Art Unit

Rip A. Lee

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to November 20, 2003.
2. ☒ The allowed claim(s) is/are 2 and 5-17.
3. ☒ The drawings filed on December 5, 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

This office action follows a response filed on November 20, 2003. Applicants have amended claim 5 and 14 to correct matters of form.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 6, line 1 replace "claim 1" with "claim 14"

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 2 and 5-17 are allowed over the closest references, U.S. Patent No. 5,554,217 to Bähler and WO 95/31507 to Wolbrink *et al.*

The present invention is drawn to a process for preparing a pigment concentrate which consists of mixing an aqueous pigment presscake, optionally at least one wetting agent, at least one dispersant, at least one dispersant, and at least one pulverulent polymer carrier, and spraying the mixture into a fluidized bed drier wherein water is removed and particles are formed. Notably, the particles thus formed are non-dusting and free flowing, and they are of uniform particle size. Contrary to conventional processes used in the art, the current method obviates a comminution step to achieve the appropriate particle size. Another aspect of the invention is use of the pigment concentrate thus obtained for coloring plastics or polymers.

Bähler relates to a process for preparing a stir-in pigment which comprises preparing an aqueous suspension of pigment presscake, filler, and texture-improving agent such as a fatty acid ester, a fatty acid salt (*i.e.*, metal soap), and waxes, adding a metal salt to precipitate the insoluble salt of the texture improving agent, and isolating the pigment composition. Wet-milling may be carried out before or after the precipitation step. The pigment composition is dried in spray drying or fluidized-bed drying equipment. The pigment composition may also contain a texture-improving agent. Clearly, the steps outlined in the invention are markedly different from that of the present invention. The mixture of the present

invention does not include filler, and wet-milling step is not used. And whereas Bähler uses fluidized bed apparatus to dry the final product, the present invention involves spraying the aqueous mixture into the fluidized bed chamber to form the particles, then dry them. Bähler does not teach spraying of the aqueous mixture into the fluidized bed drier *per se*. As there is no suggestion of this particular feature in the text, it is maintained that the skilled artisan would not have found it obvious to arrive at the claimed invention.

Wolbrink *et al.* teaches a method for preparing a pigment concentrate by comminuting pigment particles in the presence of an aqueous binder to form a paste or suspension followed by subjecting said paste or suspension to spray drying treatment. Whereas the process of Wolbrink *et al.* requires a comminution of the pigment particles, the present invention merely involves mixing pigment presscake with carrier resin without the need for comminution. This difference is substantial in that appropriate particle size is achieved by fluidized bed drying instead of milling/grinding. As such, the prior art does not teach use of fluidized bed driers as the apparatus for carrying out spray drying. Based on the teachings of Wolbrink *et al.*, the skilled artisan would not have found it obvious to use fluidized bed drying in order to arrive at the subject matter of the present claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record but not relied upon is considered pertinent to the Applicant's disclosure. The following three references describe similar pigment compositions, but their preparation requires use of grinding or milling to achieve particles of appropriate size.

U.S. Patent No. 6,365,648 to Couperus *et al.*

U.S. Patent No. 4,909,853 to Wienkenhöver *et al.*

U.S. Patent No. 4,168,180 to Peabody

The following are general references cited to show the state of the art with respect to pigment concentrates.

U.S. Patent No. 5,985,019 to McCrae *et al.*

U.S. Patent No. 5,589,531 to Menashi *et al.*

U.S. Patent No. 5,449,727 to Krieg *et al.*

U.S. Patent No. 4,391,648 to Ferrill

The following references are relevant in that they disclose spray drying apparatus.

U.S. Patent No. 5,171,613 to Bok *et al.*

U.S. Patent No. 6,106,896 to Nielsen *et al.*

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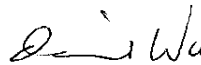
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ral

December 9, 2003



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700